

Explanation of Thermal Garments

The mandatory long sleeve thermal top and long leg thermal pants must be made of either a high performance synthetic material that is made up of fibres which are hydrophobic (ie they do not hold water) or they can be made of lightweight wool (wool does absorb water but it remains warm to wear when wet due to warm air being trapped in lots of tiny air pockets). Garments made of synthetic materials such as polypropylene, polyester and chlorofibre (PVC) are perfect as the fibres do not hold moisture. Garments made from these materials can feel slightly damp in wet conditions but that is because moisture is held in the tiny spaces between the fibres. As the fibres do not get wet these garments will actually dry out from your body heat while you are wearing them and there is no evaporative cooling effect as the moisture evaporates from the spaces between the fibres. Garments made of synthetic materials such as lycra (which is mostly nylon) and coolmax (which is polyester with fibres amended so they do absorb moisture) are not suitable for this event as they hold moisture against your skin and they also wick moisture away very well thus causing substantial evaporative cooling. All compression garments are made of lycra so they are not suitable as your mandatory thermals in this event. Cotton is also unsuitable as it absorbs water and holds the moisture against the wearer's skin. Unlike wool, cotton has no bulk to trap warm air so the wearer remains cold. In search and rescue circles cotton is called "The Fatal Fabric" and "Killer Cotton" for good reason - people die every year when caught out in the elements wearing cotton garments. Other people also caught out in the same conditions who are wearing synthetic and/or wool survive - it's a very clear cut issue. If you need further help you are best to go to any specialist outdoor store such as The North Face shop or Paddy Pallin. The staff will be able to help you choose a performance thermal garment.